## DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-014094

Address: 333 Burma Road **Date Inspected:** 09-May-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes An Qing Xiang, Tu Jun No **Inspected CWI report:** Yes No **Rod Oven in Use:** Yes No N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A Yes N/A **Qualified Welders:** No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 Tower **Bridge No: Component:** 

## **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

Bay 10, North Tower lift 4, BC Corner Diagonal Stiffener

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% and random Visual Testing (VT) of the area previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated MT report for this date. The members are identified as Tower Components. The weld designations reviewed are as follows.

NSTL4-3B/L-49, 53, 17

NSTL4-3C/L-130

NSTL4-3F/L-128

NSTL4-3G/L-124

NSTL4-3H/L-122

NSTL4-3I/L-120

NSTL4-3J/L-122

NSTL4-3K/L-122

# WELDING INSPECTION REPORT

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This Quality Assurance (QA) Inspector observed the following work in progress:

#### BAY11

#### TOWER GRILLAGE PLATE

SMAW welding of weld joint 1A located on ESD1-TL5-2B/F.

Welder is identified as 040690. ZPMC QC is identified as Mr. Li Bin.

The welding variables recorded by QC appeared to comply with WPS-B-T-3213-B-U3b.

#### LIFT 4 STRUT PLATE

SMAW welding of weld joint 19 located on ND1-STSA4-6-135M-1.

Welder is identified as 251194. ZPMC QC is identified as Mr. Liu Dao Feng.

The welding variables recorded by QC appeared to comply with WPS-B-T-2113.

SMAW welding of weld joint 5B located on ND1-STSA4-6-127M-1.

Welders are identified as 046709. ZPMC QC is identified as Mr. Mao Bin Bin.

The welding variables recorded by QC appeared to comply with WPS-B-T-3212-Tc-U5b-1.

SMAW welding of weld joint 80 located on ED1-STSA4-6-123M-1.

Welder is identified as 040724. ZPMC QC is identified as Mr. Liu Dao Feng.

The welding variables recorded by QC appeared to comply with WPS-B-T-4113-1.

#### **BAY 10**

## TOWER GRILLAGE PLATE

SMAW welding of weld joint 35A located on SSD1-TL5-1B-F.

Welder is identified as 500363. ZPMC QC is identified as Mr. Deng Zhi Bing.

The welding variables recorded by QC appeared to comply with WPS-B-T-3213-B-U3b.

SMAW welding of weld joint 2A located on SSD1-TL5-1B-F.

Welder is identified as 500363. ZPMC QC is identified as Mr. Deng Zhi Bing.

The welding variables recorded by QC appeared to comply with WPS-B-T-3213-B-U3b.

# EXTERIOR DIAPHRAGM CONNECTION PLATE (WD1-A2-1)

During random in process inspection, this QA inspector observed that ZPMC personnel was performing buttering of about 5mm~14.5mm on the edge of exterior diaphragm connection plate of WD1-A2-1. Welders are identified as 057180 & 053116. ZPMC Cwi is identified as Mr. You Qi Guo. The welding variables recorded by QC appeared to comply with WPS-345-FCAW-2G(2F)-REPAIR.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

# WELDING INSPECTION REPORT

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# **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest: 15000422360, who represents the Office of Structural Materials for your project.

Inspected By:	Gaikwad,Umesh	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer